

The Honorable Commissioner of Patents
and Trademarks

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AMENDMENTS TO THE SPECIFICATION

Please insert following paragraph after paragraph 20 in the present application as published on October 21, 2004:

Referring to Figure 1A, the present invention may utilize a measurer 102 to measure the optical signal to noise ratio (OSNR) values for each wavelength; a OSNR computer 104 to compute an OSNR range value, and an OSNR average value of the measured OSNR values; a raw power adjustment value computer 106 to compute a raw power adjustment value for each wavelength by subtracting each wavelength's measured OSNR value from the computed OSNR average value; a raw power adjustment correction factor computer 108 to compute a raw power adjustment correction factor for each computed raw power adjustment value based on the computed OSNR range value in accordance with a pre-defined variable clamp value schedule, a larger clamp is scheduled for use when the computed OSNR range value is larger, and a smaller clamp is scheduled for use when the computed OSNR range value is smaller; a multiplier 110 to determine a clamped power adjustment value for each wavelength by multiplying each computed raw power adjustment value by the computed raw power adjustment correction factor. The corresponding determined clamped power adjustment value will be applied to each wavelength. The process may be repeated until the computed OSNR range value is within pre-defined boundaries, and the signal is considered equalized.